Teaching History in a Scale-Up (Student-Centered, Active Learning Environment for University Programs) Classroom: Some Reflections on Method and Meaning

William Caraher, University of North Dakota
Cody Stanley, University of North Dakota

Introduction

Since the 19th century historians have reflected on their pedagogy and sought ways to increase student engagement. Many, century-old recommendations resonate with contemporary discussions of teaching. For example, H. B. Adams in his contribution to G. Stanley Hall's venerable *Methods of Teaching History* (1898) recommended a system where students spent the class lecturing to each other rather than frantically scribbling down notes from a lecture given by an instructor.[1] In the same essay, he highlighted the liabilities associated with textbooks, rote memorization, and what in his time was the prominent role of the lecture in the college history classroom. His observations anticipated by nearly a century recent calls to use technology to "flip the classroom" or to move faculty from their position as "sage on the stage" to "guide on the side".[2] This contemporary shift in classroom dynamics coincides with a long-standing effort to shift the emphasis in history education from content and coverage to method and practice. Combining an emphasis on "uncoverage" with a technology-mediated "flipped classroom" offers transformative perspectives on re-imagining the introductory history classroom for the 21st century.

In 2012, the University of North Dakota unveiled its first Scale-Up style active learning classroom. At the University of North Dakota, Scale-Up stands for Student-Centered Active Learning Environment for Undergraduate Programs. In contrast with smaller active learning classrooms such as the TILE classroom (Transform, Interact, Learn, Engage) at the University of Iowa,[3] the Scale-Up room at UND accommodates 180 students around 20 tables with 9 seats at each. Each table has three computers that connect to a large flat-screen monitor mounted nearby. The corners of the room have large projection screens and the walls of the room feature dry-erase style white boards. The classroom does not have a podium or any clear orientation, and this combines with the low ceiling and compromised acoustics to make formal lectures virtually impossible. The basic design for these rooms originated in the late 1990s and began as an environment designed to bring problem-based learning methods to undergraduate physics students at North Carolina State (originally the UP in the SCALE-UP acronym was "Undergraduate Physics") and has parallels with the so-called TEAL (Technology Enabled Active Learning) rooms at MIT and the ALC (Active Learning Classroom) at the University of Minnesota.[4] Since that time,

---

[1] Adams 1889.
[2] For a good introduction to the concepts see Bergmann and Sams 2012 and Lage et al. 2000.
[3] Van Horne et al. 2012.
[4] Beichner et al. 2007; Dori et al. 2007; Brooks 2010; Gaffney et al. 2008; Van Horne et al. 2012.

Scale-Up style classrooms have emerged as a way to introduce computer-mediated, student-centered learning at a scale common to the introductory level science survey[5]. Thus far, scholarship on the use of Scale-Up style classrooms to teach courses in the humanities is less common and this likely reflects the relative rarity of the practice.[6]

The Scale-Up room is well-suited to actualize the "flipped classroom" as it facilitates the method-driven approach to learning historical thinking. Adapting this approach to a history classroom contributes to recent discussions surrounding the pedagogy of the "flipped classroom". Specifically, this article will examine how the humanities classroom represents a distinct manifestation of this larger trend by demonstrating how the Scale-Up room presents an environment well-suited for both the problem-oriented focus common to the STEM disciplines and the more open-ended, process and argument based approaches common to the humanities. New teaching places allow historians to emphasize "process over product" as a way to scrutinize and shape the "invisible learning" or "intermediate processes" central to the acquisition of higher-level thinking skills.[7] The "panoptic" design of the Scale-Up room allows the instructor in any discipline to observe the learning process, to encourage collaboration between students, and to make students themselves teachers.[8] This article will connect long-term trends within the practice of teaching university level history with our preliminary encounter with teaching a history course in the Scale-Up classroom.

Historical Perspectives on Teaching History

Since the 19th century, historians have sought to articulate what some have called a "signature pedagogy" for the discipline.[9] Throughout much of the 20th century the lecture-style, "coverage method" has been the dominant format for introductory level history courses. In general, this method has prioritized an instructor who presents to students a particular body of knowledge. For history this usually involves a chronological range or set list of important issues or topics. The disciplined and orderly lecture remains the method for disseminating the necessary facts and arguments to the students in the coverage model. The instructor commonly expects students to record the lecture material in their notes, with the understanding that they will be able to reproduce the appropriate information on an exam. The coverage model coincides well with the requirements of standardized testing, which tend to emphasize the knowledge of specific facts as the foundation for deeper understanding. Part of the appeal of the lecture approach to teaching is that it is highly scalable and coincides easily with an assessment culture that privileges specific knowledge over the mastery of skills.

Despite its prevalence in the academy today, the coverage model has been under attack for well over a century. G. Stanley Hall's revered *Methods of Teaching History* (1898) represented an early effort

---

[5] Cotner et al. 2013.
[6] The scholarship on Scale-Up and other active learning classrooms is vast. For a good overview see: Brooks 2012.
[7] Wineburg 2001; Dori et al. 2007; Bass and Eynon 2009.
[8] For the Panopticon see Foucault 1977.
[9] Calder 2006

by historians to challenge traditional lecture-based courses and redefine the discipline's signature pedagogy. Professor C.K. Adams in his contribution to Hall's *Methods of Teaching History* wrote, "The mere memorizing of dry facts and assertions affords no intellectual nourishment, while it is almost sure to create a distaste for historical study, and, perhaps, will even alienate the taste of scholars forever."[10] H.B. Adams envisioned a classroom where students lectured each other and the instructor played the role of a guide. Echoing these sentiments within *Methods of Teaching* was Professor Ephraim Emerton of Harvard University in "The Practical Method of Higher Historical Instruction." In this essay, Emerton stated that in science, students work in a laboratory to understand how their discipline functions, and history should do the same. Emerton believed it to be unrealistic to expect students in history to be told a series of facts, and then to somehow instinctively know how to think like a historian. In Emerton's words, "the conclusion is inevitable, that historical teaching, to be effective, must not confine itself to lectures, but must supplement these by the method of original work."[11]

What is striking, of course, is how little Adams, Emerton, and their colleagues influenced college-level teaching over the next 115 years. There was then, and still is, a strong cohort of scholars who believes in the lecture-style and coverage model of teaching. Ironically, the traditional coverage model of teaching has long failed to produce students who met both the discipline's and the public's expectation for historical knowledge. For example, in 1942, Allan Nevins published "American History for Americans" in the *New York Times* where he bemoaned the lack of historical knowledge of the youth of America. Nevins stated, "A thorough, accurate, and intelligent knowledge of our national past—in so many ways the brightest national record in all world history—is the best ground for faith in the present and hope for the future."[12] Replying to Nevins, the American Historical Association, the National Council for the Social Studies, and the Mississippi Valley Historical Association (the forerunner to the Organization of American Historians) produced *American History: in Schools and Colleges*. This in-depth report also determined that America's youth lacked a substantial or sophisticated understanding of history.[13] Rather than stimulating change in pedagogical practices, these midcentury critiques led the profession to double down on coverage methods, and the teaching of history after World War II saw this model for teaching history solidify its dominance within the profession.[14] At the same time, despite official rhetoric, there continued to be an undercurrent of dissent, as scholars persisted in their desire to more effectively engage the students.

Robert Waller in "The United States History Survey Course: Challenges and Responses" from the February 1975 edition of *The History Teacher* articulated many of the challenges faced by history instructors at midcentury.[15] Pressured by growing enrollments and new metrics for evaluating the value of college education, history courses continued to emphasize the lecture-based coverage

[10] C.K. Adams 1898.
[11] Emerton 1898.
[12] Nevins 1942.
[13] Wesley 1944.
[14] For the intellectual roots of the commitment to the coverage methods, see: Novick 1988.
[15] Waller 1975

model, particularly at the introductory level. Innovation remained limited to graduate education and in some upper-level courses at liberal arts colleges, but the economies of scale introduced by large-scale lecture courses ensured that this long-standing approach persisted. Moreover, at the community college level instructors were, and still are, faced with a student body, due to open enrollment, that cannot be assumed to have a basic familiarity with any particular historical narrative. This has led instructors to attempt to correct for the lack of background with intensive coverage in courses designed to used names and dates while marginalizing epistemological and methodological approaches central to the disciplinary knowledge.[16]

If any emphasis on historical method did occur in the large lecture course, it happened not in the lecture hall, but in smaller discussion sections where graduate students led undergraduate students through primary sources. In many places in the U.S., especially those without substantial graduate programs, large introductory-level survey courses lacked discussion sections and exceeded the ability of a single professor to engage actively with each student in the learning process. As a result, there remained a tension between the economies of scale coverage based teaching model which leveraged the economies of scale present at the democratized university and a persistent urge to improve the learning outcomes of history classes.

The early 21st century spread of the Scale-Up classroom introduced a new architectural vocabulary that provided both economies of scale necessary to accommodate the enrolment pressures of large universities while making possible a shift from lectures to a more student-centered pedagogy.[17] These classrooms were initially developed to provide a space optimized for collaborative, problem-based learning in the sciences. The ideas of collaborative and problem-based learning date to the 1960s and 1970s and emphasize student engagement as a way to deepen student learning. The scholarship on these methods and their impact is vast, and by the 1990s, many of the larger themes associated with these trends could be grouped under a broad rubric of "active learning."[18] These approaches emphasized student problem solving and "real world" applications of both factual knowledge and abstract concepts encountered in the traditional classroom. Prompted by these initiatives, universities began to experiment with "learning studio" style classrooms in the 1980s and 1990s in an effort to cultivate "student-centered learning environments," but it was not until the late-1990s that university faculty began to reimagine the large classroom.[19] This is the context, then, into which Robert Beichner at N.C. State introduced the Scale-Up classroom. This room leveraged increasingly sophisticated "microcomputer-based laboratories" to bring collaborative and problem-based learning to large classes that would typically occur in theater-style lecture halls. Research on collaborative learning recommended that these rooms consist of tables of nine student divided into three-student pods. Experiments recommended tables with 7 ft. diameters and networked computers that allowed the instructor to display work from pods and tables to the entire

---

[16] Waller 1975.
[17] Montogomery 2008 for a larger discussion of space and active learning environments.
[18] Prince 2004; DeNeve and Heppner 1997; For its application in history and political science see: McCarthy and Anderson 2000.
[19] See the various contrinutions in Jonassen and Land eds. 2000 and Oblinger ed. 2006.

class. The development of Scale-Up style classrooms for the hard sciences fit into late-20th century critiques of traditional learning environments that were consistent with the century-old criticisms of the traditional lecture-style survey history course.

While Scale-Up rooms have not spread quickly to the humanities education, the intellectual foundation for this change has appeared nowhere more strongly than in Lendol Calder's concept of "uncoverage," which he introduced in a seminal article "Uncoverage: Toward a Signature Pedagogy for the History Survey" in the March 2006 volume of *The Journal of American History*. Calder began by reciting the long-held belief that the coverage model disengaged students from the learning process, and, as a result, it has been historically unsuccessful in forging a persistent knowledge of the historical narrative. More recently, coverage models fit only problematically into the greater emphasis on critical thinking and other learning skills prevalent in higher education today. Calder proposed a course that taught historical thinking by focusing on "problem areas" of United States history, echoing G. Graff's well-known "teach the conflicts" approach to the field of literature.[20] By having the students look at major historical episodes, combined with a variety of in-class writing activities with opportunities for student interaction, Calder strove to engage the student's cognitive skills at a higher level. He still expected students to learn the material, but more importantly to do it in the context of learning to think like a historian. Calder did not claim to establish a new pedagogy that all history instructors should take up, but he offered new perspectives on long-standing critiques of content-based learning grounded in passive, lecture-style courses.[21]

Joel M. Sipress and David J. Voelker continued this trajectory in their 2011, "The End of the History Survey Course: The Rise and Fall of the Coverage Model." Sipress and Voelker introduced "the argument-based model for the introductory course" as a new critique of the traditional coverage-based model.[22] Under this method, argument replaced coverage as the organizational principle for the course. They did not articulate a specific curriculum for this method but instead emphasized that students should be given the tools of a historian (primary sources, secondary sources, and basic research skills) and be introduced to significant historical questions. This approach allowed students to create their own interpretation of the historical events.

The recent interest in uncoverage obviously complements the larger discussion of the flipped classroom, which appears only rarely in discussions of college-level history teaching. Despite the differences in terminology, both approaches to history depend upon students coming to terms with the basic narrative of historical events on their own. This allows for the transformation of class time into seminars on methods and analysis. The development of the Scale-Up classroom plays a key component in this discussion in that it provides a way to continue to leverage the economy of scale provided by lecture-type classes, while at the same time moving toward a more student-centered classroom experience.

Course Design

[20] Graff 1992.
[21] Calder 2006.
[22] Sipress and Voelker 2011, 1063.

The Scale-Up classroom presents several opportunities to resolve practical issues associated with teaching large survey-style history courses and to implement an uncoverage approach in a relatively transparent way as a contribution to long-standing pedagogical practices in the discipline. As we have noted, we were not looking for a silver bullet that solved all the problems in the history classroom, nor are we even offering a critique of other effective methods among faculty in traditional rooms. Instead, we see our course as a contribution to a conversation in the discipline dating to the 19th century with a 21st century set of tools.

On a practical level, my (Caraher) previous introductory history classes suffered from rather high student attrition and a palpable lack of engagement with the material. These large lecture classes did not include recitations or discussion sections and were held in a traditional theater-style classroom. The rather passive attitude of the students, despite various efforts to cultivate a more active classroom, and the high drop-rate, prompted a reevaluation of my pedagogy with the goals of creating a more active classroom environment and a higher course completion rate.

While these concerns were overtly practical, they represented some deeper pedagogical commitments that I struggled to realize in a theater-style lecture setting. My feeling was that attendance, completion rates, and student attitudes correlated strongly to my ability to implement an effective pedagogy and maintain a dynamic classroom environment. My implementation of the Scale-Up classroom had three modest, pedagogical goals:

1. To evaluate and synthesize accounts of our pre-modern past.
2. To develop skills in working together as a team to produce new historical knowledge.
3. To create complex arguments based on historical evidence.

These three goals embrace the traditional historical goals of evaluation, synthesis, and argument that represent a limited, but recognizable reading of the cognitive domain in Bloom's taxonomy. Our course goals included articulating group work as both a goal of the class and as a method for mediating the process of historical thinking and analysis. The literature on the social value of group work is substantial and growing, despite some recent critiques.[23] In the Scale-Up setting, we worked to make collaborative group work the locus for the active synthesis of sometimes conflicting accounts of the past as well as the place to deepen student engagement in the classroom environment. Consistent with both our historical perspectives on the development of pedagogy in the field and the character of the Scale-Up classroom, we followed H. B. Adams's advice and shifted the responsibility of presenting content to the students. The students were then responsible for producing a plausible historical narrative by analyzing and synthesizing primary and secondary sources.

[23] Johnson, Johnson, Smith 2007; Shimazoe and Aldrich 2010.

My graduate assistant (Stanley) and I designed a course to run in the new Scale-Up classroom that met one day a week for 2 hours and 20 minutes.[24] The course enrolled over 160 students who filled 18 of the 20, 9 student tables in the room. We then asked each table to write a single chapter for a history textbook that was to be produced by the entire class. To provide the students with some basic context for their chapters, we prepared a list of 7 typical Western Civilization textbooks and asked each student at each table to purchase one from the list so that at least one copy of all the textbooks would be represented at each table.[25] Because we were less concerned about content, we could be flexible about the editions of the textbooks that students purchased. These books were to be resources for the students at the table rather than required companions to my lectures. We also made available a series of podcasts prepared for an online version of the course, some online primary source readers, and copious links to Wikipedia pages and quality academic websites. To add some overarching structure to the class, we included a short overview of pre-industrial societies written by the Islamicist Patricia Crone to introduce the students to broad themes and models of understanding the nature of pre-industrial societies. By assigning multiple sources of information, including primary sources, websites, and several textbooks, we were able to complicate the source of authority in the class and to encourage students to engage conflicting perspectives. If part of the motivation in flipping the classroom was to be socially disruptive to student expectations, it made sense to "flip the textbook" as well.

On the micro level we attempted to maintain a relatively standardized approach to our classes each week. This allowed students to get into a routine and develop iterative practices that reinforced feedback received at the group level at the individual level. The basic method that we used to engage students involved exercises that asked students to collect historical data first as individuals, evaluate this historical information as 3-student pods, and then synthesize the pod work at the level of the table. Each class period, in turn, was designed explicitly toward the production of a textbook chapter by each table in the class. During a typical class period, students were asked to individually begin to produce a short written assignment. In pedagogical terms, we introduced distinct practices geared toward establishing "knowledge" (in the terms of Bloom's taxonomy). These assignments ranged from relatively simple tasks like timeline building to more challenging tasks of identifying the potential significance of a primary source, event, or individual. Typically, these tasks were short assignments administered as quizzes at the very start of the class. We then asked the students to work together as pods to compare the results of their individual work and to evaluate the compatibility and suitability for the larger project of writing the chapter. The large group, then, faced the task of synthesizing the pod work into a critical and integrated view of the past. Invariably over the course of the semester the work at the pod and table levels shaped the approach individual students had to collecting and understanding historical evidence. Students who were more comfortable with conceptual thinking helped those students less inclined to think in terms like time, agency, and the use of interpretative models. We provided our most extensive feedback at the level

[24] For the use of longer blocks of time in the Scale-Up room see Beichner et al. 2007.
[25] Coffin et al. 2013; Hunt 2012; Kishlansky et al. 2010; McKay et al. 2014; Noble et al. 2014; Pavlac 2011; Spielvogel 2013.

of the group, where the number and complexity of assignments (18) both allowed for and rewarded the most involved scrutiny.

On a macro level, we organized the work for the class over the fifteen-week semester during which time we guided the students through the process of writing a textbook chapter. The first 6 weeks focused on major themes central to the study of the history of pre-industrial societies. These included introducing some basic models for understanding how pre-industrial societies functioned, discussing the difference between primary and secondary sources, exploring various methods of chronology and periodization, interrogating the limits of individual and institutional agency, and pondering the role of geography in the formation of the West. We presented each table with a series of assignments that asked them to address these issues in the context of the chapter that they were assigned to write. In most cases, we began by asking each individual student to offer preliminary observations on an issue, problem, or task associated with the chapter assigned. Then, the three student pods would typically bring these individual observations together into an aggregate list or paragraph that represented all of the students' perspectives. Finally, the table would bring together the pod work both to address a more complex, analytical question and to present their work to the rest of the class via a group wiki in our online classroom management software (Blackboard). Typically, the analytical questions asked the students to reflect on the evidence that they collected as a table in the context of Patricia Crone's larger model for understanding a pre-industrial society. The appeal to a common text, like that of Crone, ensured that each table's work would have some points of similarity with that being done at the other tables.

Case Study 1

A brief case study from the first third of the semester demonstrates how we managed moving from individual work to group work over the course of a period in the Scale-Up room. For week 3, we asked the students to build a basic chronology for their chapter. This prompted students to reflect on the relationship between the periodization schemes that we implement as historians, to recognize dates that historians have traditionally recognized as significant, and to understand the chronological relationships between historical events and primary sources. Prompts for the class were kept general, and projected across the room's multiple screens. Once completed, individual and pod writing assignments were placed in a folder located on each table; table-level writing assignments were posted by noon the next day on designated wikis within the course management system software. Our activities followed four steps:

1. The class began with a quick quiz based on a homework assignment. It asked the students to produce a list of three dates significant to their chapter and to justify their choice.

2. As soon as the individual quiz was done, we asked each pod to consider the chronological periods present in their chapter. This is different, of course, from a list of dates. We asked the students to identify the key chronological periods in their chapters and to produce a list of 10-15 dates that contribute to the definition of these chronological periods. So, for example, a table might

identify the Battle of Salamis, the Battle of Chaeronaea, and the death of Perikles as significant, constituent dates for the Classical Period. 30-40 minutes.

3. Once the pods had created their provisional lists of dates and periods, we asked the tables to compile these into a master chronology and to integrate a list of primary sources compiled the previous week. Rather than just placing the primary sources in the proper place in the chronology, we prompted the students to explain how the primary sources fit into the chronology. The discussion at the table involved both revising and expanding upon the lists produced by the pods.. This not only encouraged the students to reflect on the rather elastic definitions of "primary" sources in antiquity and the Middle Ages (for example, the Roman Historian Arrian is often considered a primary source for Alexander the Great!), but also reflect on the idea that our sources exist within the framework of events. 60 minutes.

4. The students did all this work with the understanding that compiling periods, dates, and sources contributed to their larger project of producing a framework for their chapter and interrogating both chronology and dates as key structuring elements in the discipline. An ideal assignment would then have the students revise their quizzes to see how the group work influenced their understanding of how and why particular dates are significant.

The second third of the semester focused on the steps involved in preparing the chapter that each table was assigned. The first assignment in this section asked each table to provide a brief proposal for their chapter that stated the chronological range that the chapter would cover, set out the main arguments, and list the primary sources each chapter would cover. The groups posted these to a wiki and made them available for critique by the members of other groups over the course of the week. The groups would continue to revise their proposals and had a quiz on the character of critique offered by both the instructors and their fellow students at the start of the next class.

Case Study 2

Here are the classroom assignments for the revision of the proposal. Notice how revising the proposal and preparing the outline were part of the set of activities in a class.

1. Each individual took a short quiz with this prompt: What were the three most significant changes necessary to improve your group's proposal? 10 minutes.

2. Send ambassadors to other groups to negotiate how groups will address areas of overlapping significance, narrative, or other content without being redundant. 20 minutes.

3. After doing that, revise your prospectus while also paying particular attention to three areas where we have made significant criticisms: (1) Make sure you state clearly how the various events, individuals, and institutions fit together in your chapter. This will prevent your chapter from being "one damn thing after another." (2) Provide some indication of the primary sources that you will use in your chapter. (3) Proofread. 40 minutes.

4. Using the proposal as a guide, develop an outline for your chapter. The outline establishes how each part of the chapter will fit together. The more detail that you put in the outline, the better.

The best outlines will include primary sources and specific evidence that will support the arguments you intend to make in your various chapters. 60 minutes.

5. Using the outline, prepare a contract for each pod in the group. Each pod must be responsible for writing at least one part of the chapter. I might suggest assigning two major sections to each pod (see the format below). 10 minutes.

The proposal provided a basic statement that guided the students over the next class as they prepared an outline for their chapter. The outline organized the chronology, major topics, and primary sources used in each chapter. It also became the contract for writing the chapter. Each table worked together to distribute the work of writing the chapter to individual pods. We suggested that the chapters run between 5000 and 6000 words and so each pod at the table should prepare a 1000-2000 word draft section over spring break. The class meetings after spring break involved each table reviewing the work of the pods and synthesizing it into a single cohesive whole. Most of the work developing the outline took place during a single particularly productive class where the students worked for close to 2 hours straight to organize the structure of their chapter and divide the writing work among their fellow students.

At each step in the process of drafting the chapter, we guided the students through a rather intensive revision process which involved continuing to revise the proposal, their outlines, and their chapters continuously. This process helped the students maintain the organization of their chapter through an outline, the main emphases and arguments articulated in the proposal, and the actual chapter draft that they were developing. Much of the revision process took place at the level of the pods. By asking the pods to reflect on the proposal, outline, and draft during class time, we created an environment filled with ongoing discussion about the structure and argument of the text. At this point, groups also identified images, maps, and primary source excerpts to complement their chapter texts. They also revised their drafts to ensure that each had proper citation.

The final five weeks of the semester involved inter-table peer review of the completed and relatively refined and edited chapter drafts. Each chapter underwent two rounds of peer review and editing. Individuals prepared peer review reports which were then compiled into a series of formal reviews directed toward each table's chapter. Each table received three peer reviews from other tables and composed a response that outlined how they intended to address these critiques. The revised chapter was the final product of each table.

Throughout the course, each table posted their weekly work to a wiki page which made it visible to other groups. The use of the wiki contributed to the transparency of the writing process both to the instructors and to the other tables as well.

Challenges and Opportunities

Flipping both the classroom and the textbook during the same semester required a significant leap of faith and the support of an extraordinary group of colleagues who contributed ideas, tempered their skepticism, and provided encouragement. The course also benefited from a

particularly dedicated graduate teaching assistant (Stanley who is now co-author), a receptive class, and a technologically sophisticated Scale-Up classroom. Despite the supportive environment, challenges remained involving the balance between innovative classroom management techniques and desired pedagogical outcomes. In fact, we discovered that moving a class to a Scale-Up environment not only problematized several larger trends in teaching history, but also spoke to larger trends common to innovative classrooms across disciplines in the academy.

Here, we highlight three key issues and bring in some data from a survey developed by the University of Minnesota to understand how their own "Active Learning Classrooms" worked.[26] Student responses provide some preliminary conclusions for the opportunities and challenges that we have teaching history at a large-scale in this kind of classroom.

1. Uncoverage

Students have deep-seated expectations for how history courses work. Despite the daunting task of presenting and absorbing hundreds (or even thousands) of years of historical content in a single semester course, students continue to prefer the familiar routine of coverage based learning. The survey conducted at the conclusion of the course revealed that a substantial number of students found the lack of comprehensive coverage disappointing. Students found focusing on a single period or problem for the entire semester boring and unsatisfying for an introductory history course. Some students even wondered whether the lack of coverage in Western Civilization I would leave them at a disadvantage if they decided to take Western Civilization II overlooking, perhaps, that these two courses are not designed in sequence nor is Western Civilization I a prerequisite for Western Civilization II. This desire for coverage offers an important future point of entry into the debate of how content-based lectures are implanted into students' expectations of college.

For most students, methods, models, and skills are secondary learning objectives in the history classroom and are perhaps best reserved for upper-level courses catering to majors. Because students have come to expect content, they often find themselves at a loss without the structuring routine of lecture-based learning. Subsequent iterations of this course will emphasize more coverage and content, primarily to placate student expectations and put the students into a more comfortable place in the classroom setting.

To provide continuity potentially lacking from an overly-granular approach to history, we emphasized how Crone argued that all pre-industrial societies suffered from scarcity and lack of transportation and communication. These limitations tended to produce small, fragile states characterized by limited social services, small ruling elites, weak markets, and brutal laws. Students quickly expanded Crone's basic model for how pre-industrial societies functioned to include close relationships between rulers and the divine, the tendency to allow local authorities to govern communities even when ruled by a foreign empire, and the tendency for power to decentralize quickly during periods of political, economic, and military strife. Crone's work provided an aerial

[26] Whiteside et al. 2010.

view, which allowed the class to identify the kinds of culturally or politically significant details that stand at the core of coverage-based models of history.

Using a model like that proposed by Patricia Crone provided both a context for understanding historical facts as evidence, and an argument for students to respond to and critique with the sources and events for their period. Future iterations of this course will require that we make more clear that coverage in a history course does not simply involve states, rulers, and cultures, but at the same time, some concessions to a student's expectations often makes the more challenging or innovative parts of the course more palatable.

2. Hands-Off Pedagogy.

Part of the reason for lecture-style courses is the undeniable economy of scale for delivering content offered in the large lecture classroom. The size of Scale-Up style rooms offers a new opportunity to combine the enrolments of a large classroom with more student-centered forms of pedagogy. Most active learning environments in history developed from 19th century models of the small seminar where the professor leads students through the intricacies involved in the critical reading and synthetic analysis of texts. The kind of hands-on pedagogy associated with seminars, however, does not scale well.

As we attempted to integrate the benefits of active learning pedagogies to the large-scale classroom, we confronted a significant change in how we understood our role as teachers. We had to move from leading the students through the critical engagement of texts as we might in a smaller class to stepping back and letting students succeed, fail, and learn in their own way.[27] The large size of the Scale-Up class prevented anything more than situational interventions in the learning process. Unlike a lecture, where we would model critical engagement with primary and secondary sources and construct complex arguments, the flipped classroom shifted the focus away from modeling and toward working with students in a more hands-on way, creating situations where students can teach one-another, and even occasionally allowing students to struggle and fail on assignments. Our approach seems to have resonated with the students, nearly 70% of whom when surveyed at the conclusion of the class agreed that the course "nurtured a variety of learning styles."

To create an environment where students can succeed, we followed our commitment to uncoverage and directed our attention to process. At the same time, we shifted the place of learning and teaching from the individual to the pod and table. To do this, we provided the most substantial feedback and assessment at the pod or table level and required that it trickle back to the individual. This approach encouraged the students in a group to communicate the results of their work to all individuals at the table. It also anticipated that students would bring a wide range of skills to the class and that learning the historical method would rely on the collaborative environment at the table level. Since we could not lead every student through the pedagogical process on an individual basis,

[27] This process is often referred to as "self-regulated learning." See: Zimmerman 2002, 2008.

we created situations which both encouraged the better students to elevate those with less well-developed skills.

Students noticed the more hands-off approach to teaching. One of the most consistent student comments was that there was not enough personal attention or that we did not respond quickly enough to student questions. These remarks, of course, are interesting in the context of a traditional lecture-style history course where there is little one-on-one interaction between faculty member and students. The survey reflected the change in student expectation present in the Scale-Up environment: 84% of the students noted that the instructors met with individual students at least once a class and 96% of the students reported that the instructors met with student groups at least once per class. During class time, we were constantly moving from group to group to address concerns, answer questions, and give gentle hints and nudges to move the process forward. Students not only received a significant amount of personalized attention, but wanted even more in the class. Despite any lingering appeal of lecture hall type classes, students genuinely expected interaction with the faculty. This desired interaction with faculty is an important step in deconstructing the student as an empty vessel, and reconstructing them as a student-teacher.

As our hands-off pedagogy relied on students interacting extensively with one another, we found that they did so regularly and consistently. For example, 85% of students agreed or strongly agreed that the Scale-Up room promoted discussion. 75% percent agreed or strongly agreed that the room encouraged active participation. And 71% agreed or strongly agreed that the course encouraged them to communicate effectively. If these numbers are useful for judging student engagement, then they demonstrate that students did become more engaged in the learning process. The survey also suggests that this classroom and my course had a positive impact on the social environment of learning. 79% agreed or strongly agreed that the course helped them develop confidence working in small groups. 87% agreed or strongly agreed that this room helped the students develop connections with their classmates. This presumably provided a social environment for the critical engagement with their classmates' work as 74% claimed that the class helped them examine how others gather and interpret data and assess the soundness of their conclusions. As Arum's and Roksa's recent work has suggested, the cultivating a positive social environment for engagement and learning may have a significant impact of student success.[28]

3. Managing the Collaborative Classroom

In traditional lecture-based classes, the appearance of one-to-one faculty to student relationships emerges through the experience of encountering the lecture as an individual student. Like a skilled performer, the lecture seeks to engage students on an individual level despite the one-to-many arrangement of the lecture hall. This well-established relationship between the presenter of information and analysis and the audience led to fairly clear principles of classroom management.

[28] Arum and Roska 2010

Students consistently complained on the survey that the Scale-Up room could not provide that illusory one-to-one sense of interaction present in a traditional lecture hall.

The Scale-Up room required a different set of management principles to realize our pedagogical goals and foster the spirit of collaboration necessary to support a hands-off, student-centered pedagogy. Students were largely unfamiliar with the room, tended to resist collaborative work, and had habits that saw social interaction and the educational experience as being separate and incompatible. In fact, the most consistent comment throughout the survey was that group work was inherently unfair. Working in the Scale-Up room required students to become familiar with a range of technologies and practices necessary to develop the social cohesion necessary produce collaborative work. So at the same time that we moved the students through the process of developing skills in the historical method, analysis, and writing, we also had to create an environment which shifted student expectations of how a classroom functioned.

There were three main challenges to managing the Scale-Up classroom that can likely be applied to other similar environments. First, we had to manage the uneven pace of student learning. To do this we had to come to accept that some students and groups would not complete assignments successfully in the time allotted. We determined that rushed students were, on the whole, better than bored students and that providing more than the average time necessary to complete an assignment did not produce better results or sustain classroom attention. Moreover, we tended to prefer classroom activities that built upon one another. This allowed slower pods or tables to continue to work on earlier assignments even as other groups forged ahead.

Students were obviously concerned about the uneven distribution of workload in a group environment. Ironically, the design of our pedagogy created an environment where better students guided students who are struggling, and this explicitly addressed the potential of asymmetrical outcomes to create a level playing field for student workloads in a class. To combat the perception of asymmetrical work, we asked the students at the outline stage of the chapter writing project to assign specific parts of the longer writing project to individual students or to pods. This allowed groups to continue to organize their workflow in a way most suitable to the individual skills present at the table and, at the same time, allowed students to perform individually, if that was more suitable for the particular group. We also quizzed students regularly and had an individualized midterm designed to measure their individual engagement with the project of the class. We recorded individual and group grades separately.

Finally, each table in the Scale-Up room has only three computers. This was a conscious design decision to facilitate collaboration at each table. Unfortunately, the basic design of the laptop computer works counter to this arrangement. The design of the laptop facilitates a personal relationship between the interface and the individual, and this works to subvert the device as a tool for collaboration. It was possible for one laptop at each table to project its screen to a flat screen television associated with this table, and this made it possible for the entire group to read the work produced on one laptop.

This limitation fundamentally structured the kind of projects possible in the classroom. Any sustained writing, for example, had to take place at the level of the pod rather than the individual

level, and this ensured that there would be a human filter between the digital and social production of texts. The room could not easily support exercises that involved the reading or editing of texts on the web because it was impossible for more than three students at each table to engage the text at one time. As an amusing example, we asked students to conduct a simple assessment survey on the effectiveness of the room using the three laptops available at the table. The students ended up collaborating in their approach to this survey despite the fact that students were told to fill it out as individuals. In contrast, students filled out the paper-based scantron type assessment of the class as individuals without much conversation with their classmates. While these two assessments were different in character, the way that students engaged the assessment process demonstrates how the organization of space on the table transformed how students engaged tasks.

At the same time, the collaborative design of the table meant that there could be no more than three projects taking place at each table. It also made it difficult for pods to do projects that involved searching for information on the web as one student tended to control the mechanics of search and the other students became easily distracted. In a world where personal computing is becoming the norm, pushing students toward collaborative problem solving without equal access to the internet created behaviors that had both benefits and inefficiencies.

Reflections and Conclusions

The textbook that the students produced was solid. It demonstrated a clear grasp of the basic narrative, a willingness to engage primary sources, and the ability to balance historical details with larger conceptual and thematic concerns. The performance of the groups was largely consistent across the class and no group failed to produce an acceptable chapter. The editing and revision process eliminated most of the major historical and stylistic issues, and a simplified citation system eliminated much of the friction that can discourage proper references to outside work. The work demonstrated a solid command of the historical method and an ability to communicate narrative and concepts to a large audience. Despite the resistance to uncoverage, retention and attendance rates were exceptionally high compared to my previous experience teaching introductory level courses with more than 80% of the enrolled students completing the course and regular attendance figures consistently over 75%. High retention rates, engagement, and student performance indicate that the combination of uncoverage and the Scale-Up classroom offers an environment where students can thrive.

The Scale-Up room provides a distinct environment for deploying new approaches to the survey history course and makes manifest some larger trends in the direction of higher education in the U.S. The size of the room preserves some of the economies of scale associated with the large, introductory survey course and, at the same time, embraces recent trends toward "active learning" environments. The collaborative Scale-Up space has allowed the instructor to cede the role of active instructor for the role of facilitator as students leverage their collective intelligence to complete both the task at hand as well as the larger project of understanding the historical method. The growing

popularity of these kinds of student-centered and active learning pedagogies on American college campuses is far from revolutionary in the discipline of history; in fact, it represents the continuation of long-term discussion. From such early luminaries as H.B. Adams, who transplanted Leopold von Ranke's seminar to the United States, to more recent advocates of uncoverage in the history survey, history has long stood as a discipline dependent upon method for its claims to truth.[29] The attention to training students in the historical method belies, perhaps, the dearth of students who go on to actually produce historical truth as professional historians. Instead, the method-based approach to the discipline supports larger goals in the humanities to produce students capable of clear argumentation, writing, and critical thinking. The intersection of active learning and the disciplinary privileging of method in history creates an ideal situation for the use of the Scale-Up environment.

William Caraher
Associate Professor
Department of History
University of North Dakota

Cody Stanley
Ph.D. Candidate
Department of History
University of North Dakota

[29] Novick 1988.

Bibliography

Adams, C.K., "On Methods of Teaching History," in G. Stanley Hall ed., *Pedagogical Library Volume I: Methods of Teaching History*. Boston: D.C. Heath & Company, 1898, 203-213

Adams, H. B., "Special Methods of Historical Study," in G. Stanley Hall ed., *Pedagogical Library Volume I: Methods of Teaching History*. Boston: D.C. Heath & Company, 1898, 113-148.

Arum R. and J. Roska, *Academically Adrift: Limited Learning on College Campuses*. Chicago: University of Chicago Press, 2010.

Bass, R. and J. Eynon, "Capturing the visible evidence of invisible learning," *Academic Commons* (2009). http://www.academiccommons.org/2009/01/capturing-the-visible-evidence-of-invisible-learning/. Accessed August 1, 2013.

Bergmann, J. and A. Sams, *Flip Your Classroom: Reach Every Student in Every Class Every Day*. Eugene, Oregon: International Society for Technology in Education 2012.

Beichner, R. J., & Saul, J. M.. Introduction to the SCALE-UP (Student-Centered Activities for Large Enrollment Undergraduate Programs) project. *Proceedings of the International School of Physics "Enrico Fermi," Varenna, Italy*. http://www.ncsu.edu/per/scaleup.html (2003). (accessed August 19, 2013).

Beichner, R. J., J. M. Saul, D. S. Abbott, J. J. Morse, D. L. Deardorff, R. J. Allain, S. W. Bonham, M. H. Dancy, and J. S. Risley, "The Student-Centered Activities for Large Enrollment Undergraduate Programs (SCALE-UP) project," in *Research-Based Reform of University Physics*, edited by E. F. Redish and P. J. Cooney. College Park, MD: American Association of Physics Teachers, 2007.

Brooks, D.C., "Space matters: The impact of formal learning environments on student learning" *British Journal of Educational Technology* (2010), no page numbers

--, "Space and consequences: The impact of different formal learning spaces on instructor and student behavior" *Journal of Learning Spaces* 1 (2012): http://libjournal.uncg.edu/ojs/index.php/jls/article/view/285/275 (accessed July 24, 2013).

Butler, D. and P. Winne, "Feedback and Self-Regulated Learning: A Theoretical Synthesis," *Review of Educational Research* 65 (1995), 245-281.

Calder, L., "Uncoverage: Toward a Signature Pedagogy for the History Survey" *The Journal of American History* 92:4 (March, 2006), 1358-1370

Collingwood, R.G., *The Idea of History*. Ed. T.M. Knox. Oxford: The Clarendon Press, 1946.

Coffin, J., R. Stacey, J. Cole, C. Symes, *Western Civilizations: Their History and Their Culture. Volume 1*. New York: W.W. Norton, 2013.

Cotner, S., J. Loper, J. D. Walker, and D. C. Brooks, "It's Not You, It's the Room" - Are the High-Tech, Active Learning Classrooms Worth It?" *Journal of College Science Teaching* 42 (2013), 82-88.

Crone, P., *Pre-Industrial Societies*. Oxford: Basil Blackwell, 1989.

DeNeve, K.M., and M.J. Heppner, "Role play simulations: The assessment of an active learning technique and comparisons with traditional lectures" *Innovative Higher Education* 21(1997), 231-246.

Dori, Y., E. Hult, L. Breslow, and J. Belcher (2007). "How much have they retained? Making unseen concepts seen in a freshman electromagnetism course at MIT" *Journal of Science Education and Technology* 16:4 (2007): 299-323.

Emerton, E., "The Practical Method in Higher Historical Instruction," in G. Stanley Hall ed., *Pedagogical Library Volume I: Methods of Teaching History.* Boston: D.C. Heath & Company, 1898, 31-60.

Foucault, M., *Discipline and Punish: The Birth of the Prison*. trans. A. Sheridan. London: Penguin Books, 1977

Gaffney, J. D. H., E. Richards, M.B. Kustusch, L. Ding, and R. J. Beichner. "Scaling up education reform," *Journal of College Science Teaching* 37:5 (2008), 48-53.

Graff, G., *Beyond the Culture Wars: How Teaching the Conflicts Can Revitalize American Education*. New York : W.W. Norton, 1992.

Grow, G. O. "Teaching learners to be self-directed" *Adult Education Quarterly,* 41:3 (1991), 125-149.

Hall, G. S. ed. *Pedagogical Library Volume I: Methods of Teaching History*. Boston: D.C. Heath & Company, 1898.

Higham, J., *History*. Englewood, New Jersey: Prentice-Hall, 1965.

Hunt, L. The Making of the West: *Peoples and Cultures. Volume A (to 1500)*. Boston : Bedford St. Martin's 2012.

Jackson, P.W. *Handbook of Research on Curriculum: A project of the American Educational Research Association*. New York: Macmillian Publishing Co., 1992.

Jonassen, D.H. and S. Land eds., *Theoretical Foundations of Learning Environments*. Mahwah, NJ: Lawrence Erlbaum Associates. 2000.

M. Kishlansky, P. Geary, P. O'Brien, *Civilization in the West. Volume A (to 1500).* Upper Saddle River, N.J. : Pearson Education/Longman, 2010

Lage, M. J, and Glenn J. Platt and Michael Treglia, "Inverting the Classroom: A Gateway to Creating an Inclusive Learning Environment" *The Journal of Economic Education* 31:1 (2000), 30-43

McCarthy, J.P. and L. Anderson, "Active Learning Techniques Versus Traditional Teaching Styles: Two Experiments from History and Political Science," *Innovation in Higher Education* 24:4 (2000), 279-294

J. P. McKay, Bennett D. Hill, John Buckler, et al., *A History of Western Society. Volume A: Antiquity to 1500*. Basingstoke : Palgrave Macmillan, 2014.

Michael, J., "Where's the evidence that active learning works?" *Advances in Physiology Education,* 30:4 (2006), 159-167.

Montgomery, T. "Space matters: Experiences of managing static formal learning spaces," *Active Learning in Higher Education* 9:2 (2008), 122-138.

Nevins, A., "American History for Americans" *New York Times*, May 3, 1942

Thomas F.X. Noble, B. Straus, D. Osheim and K Neushchel, *Western Civilization: Beyond Boundaries*. Belmont, CA : Wadsworth Cengage Learning, 2014.

Novick, P. *That Noble Dream: The 'Objectivity Question' and the American Historical Profession*. Cambridge: Cambridge University Press 1988.

Oblinger, D.G. ed., *Learning Spaces*. Boulder, CO: Educause 2006.

B. Pavlac, *A Concise Survey of Western Civilization. Prehistory to 1500*. Lanham, Md : Rowman & Littlefield Publishers, 2011.

Preszler, R. W., "Replacing Lecture With Peer-Led Workshops Improves Student Learning" *CBE-Life Sciences Education,* 8:3 (2009), 182-192.

Prince, M., "Does active learning work? A review of the research." *Journal of engineering education*, 93:3 (2004), 223-231.

Sipress J. M, and D. J. Voelker, "The End of the History Survey Course: The Rise and Fall of the Coverage Model" *The Journal of American History* 97 (2011), 1050-1066.

Jackson Spielvogel, *Western Civilization (to 1500). Volume A*. Belmont, CA : Wadsworth, Cengage Learning 2013.

Van Horne, S., C. Murniati, J.D.H. Gaffney, M. Jesse, "Promoting Active Learning in Technology-Infused TILE Classrooms at the University of Iowa," *Journal of Learning Spaces* 1:2 (2012), no page numbers.

Waller, R.A., "The United States History Survey Course: Challenges and Responses," *The History Teacher* 8 (1975), 199-207.

Whiteside, A.I., D.C. Brooks, and J.D. Walker, "Making the Case for Space: Three Years of Empirical Research on Learning Environments," *EDUCAUSE Quarterly* (2010). http://www.educause.edu/ero/article/making-case-space-three-years-empirical-research-learning-environments. Accessed August 1, 2013.

Wesley, E. B,. *American History in Schools and Colleges - 1944: the report of the Committee on American History in Schools and Colleges of the American Historical Association, the Mississippi Valley Historical Association, the National Council for the Social Studies*. New York: MacMillen and Co. 1944. http://www.historians.org/pubs/archives/AmericanHistory_1944/. Accessed May 22, 2013.

Wineberg, S., *Historical Thinking and Other Unnatural Acts: Charting the Future of Teaching the Past*. Philadelphia: Temple University Press, 2001.

Zimmerman, B.J., "Becoming a Self-Regulated Learner: An Overview," *Theory and Practice* 41.2 (2002), 64-70.

--, "Investigating Self-Regulation and Motivation: Historical Background, Methodological Developments, and Future Prospects," *American Education Research Journal* 45.1 (2008), 614-628.